

Posted on: August 25, 2016 - 8:42am

The Town's Drought Crisis Management Team met Tuesday. We are focusing on immediate short-term response to the drought in a two-pronged approach (supply and demand issues). We are also developing a program for long-term resiliency as a third prong.

### **Challenges:**

- People have misinformation or not enough information about the ban and what they can and cannot do.
- People think the Town has "no plan."
- There is a public misconception that the reservoir is our only water source when, in fact, about 900,000 gallons per day is sourced from wells.
- Humarock is included in the ban despite receiving water from Marshfield
- The drought is going to last for a couple of months and residents will tire of the ban.

### **Rain Probability:**

State meteorologist in a MEMA conference call on Friday predicts less than a 50-50 probability that significant rainfall will occur before November. Tim Kelly (NECN meteorologist and Scituate resident) informs us that in the next 28 days only ¼" of rain is predicted.

### **What we are working on:**

The objective is to match supply and demand so that the wells handle the everyday load and the reservoir is held in reserve for emergencies. This is attainable post Labor Day with added conservation efforts by residents and improvements to water production capability.

### **Supply:**

- We received an inch of rain over the weekend. However, the current low humidity conditions this week result in evaporation from the surface of the Pond and Reservoir. Net, we saw only a ¼" increase in reservoir level which is since evaporated. The reservoir is at 22.64% today.
- We are refurbishing well 17 off Tack Factory Road and expect this work to be completed by Friday. We estimate production from this well will increase from 100,000 gpd (gallons per day) to 300,000 gpd. This will assist greatly. Because of high manganese levels in this well, its water is discharged into Old Oaken Bucket Pond (OOB) and then passes through the Water Treatment Plant.
- The Widows Walk irrigation well has been rebuilt so the golf course no longer requires Town water for irrigation.
- We are exploring a system to ensure that water does not get lost over the OOB Pond spillway. This may involve pumping excess water from OOB back to the Reservoir.
- We are in regular contact with Marshfield, Norwell, and Cohasset about water. We are conducting chemical testing to ensure that the water from these towns is chemically compatible with ours (to avoid any corrosion issues.) The potential connection with

Cohasset is on the border of the two towns on Summer Street. The Water Departments are establishing a test connection next week. The connection with Marshfield is problematic because its 6-inch mains abutting Scituate are old cast iron and break frequently. There is concern that additional water flow into Scituate would tear up the pipes. Both Towns' Water Departments will continue to explore options as all recognize collaboration is paramount during this situation.

- Cohasset agrees to provide emergency connections in the event of fire event that overwhelms our system.
- Chief Murphy is exploring options to obtain water tank trucks to have in the mutual-aid area for back-up fire-fighting supplies. Additional salt water hose, to draw ocean water for shoreline fires, is also being acquired.
- The TA is scheduling a meeting with the three abutting town administrators to discuss the opportunities for MOU's for water sharing in the future.
- The Public Health Director identified another 25 wells not on its list of 89 private wells. Some of them may be old abandoned Town wells. For those we identify that did not register with us, the Board of Health (BOH) will be in touch with those residents.
- Inquiries for new private wells have overwhelmed the BOH. At the same time, the BOH, with the support of the Water Resources Committee, is exploring the need for more restrictive regulations on drilling new wells.

#### **Demand:**

- We have instituted an aggressive public information campaign to (1) provide residents with accurate information about our water supply system (2) allay the panic being created by local social media sites and (3) suggest actions everyone home and business can take to help deal with the lack of rain.
- 100% of the households will receive a postcard next week describing the water ban and steps they can take to reduce usage.
- PSAs are being developed on conservation measures and how our water system/supply works. These will air on SCTV and YouTube. Links will be on the Town's website and Facebook page.
- We are working on placing a special water conservation sheet in the Council on Aging monthly newsletter for our senior residents who may not be on line.
- The BOH is contacting restaurants and requesting that they not to serve water unless asked for by customers.
- The contractor installing the new waterlines has been instructed to leave them dry until later this fall. This delays the use of a significant quantity of water needed to flush, chlorinate and de-chlorinate these pipes. Once the drought has ended, the contractor will activate the new mains.
- All public information released relating to the water ban will also be sent to the Scituate Mariner, Patriot Ledger and WATD.
- We will continue to post detailed updates on Facebook. We want to push everyone we can to the Town's page for **official and accurate information.**
- Police and Assistant Harbormasters will be in the harbor to enforce no boat washing.
- After Labor Day our household water demand drops due to the summer population decrease. In the past this coincides with allowing residents to resume aggressive lawn

irrigation. This year the water ban will remain in place and no outside watering (other than with watering cans) will be allowed. The Police and the Water Department are actively monitoring this and issuing citations as appropriate. We have increased enforcement on the week-end and evening/early morning hours.

- Midnight shift Police Officers will continue to monitor for nighttime irrigation violators.
- Town fields and the Town's three construction sites have been complying with the same restrictions thus far.
- The North South River Watershed Association (NSRWA) is also working with us to develop a conservation education program to hopefully be presented in the schools.

### **Future Resiliency**

- In 2013-14 the DPW completed a study funded by the Department of Environmental Protection (DEP) to increase the height of the Reservoir spillway by 18-inches. Tetra Tech Engineering developed the 30% design and is preparing a proposal to finalize the design and pursue permitting. We are applying for a grant to fund this work. The target is to have a funding request reviewed as part of FY 18 capital plan submissions. The total cost of the project is about \$850,000.
- We are revisiting the Dolan Well development work to see if the Town should spend funds on developing this well property located off Country Way between Hollet and Captain Peirce Roads.
- The Water Department is developing a project to install a 'green sand filtration system' at well 17. This will remove manganese and allow the water to be fed directly into our distribution system vs. pumping into OOB Pond. This saves the cost of running this water through the treatment plant and reduces evaporative losses.

### **Thank you**

We recognize this is an extraordinary time for our community. Your conservation efforts have already helped and increase conservation will benefit us multiple times over. Thank you for your cooperation.

### **Scituate Water Drought Crisis Management Team Members:**

- Al Bangert, Special Projects Coordinator, Chair
- Kevin Cafferty, DPW Director
- Sean Anderson, Water Superintendent
- John Murphy, Fire Chief
- Al Elliot, Deputy Fire Chief
- Jennifer Keefe, Board of Health Director
- W. Michael Stewart, Chief of Police
- Tim Kelly, Coastal Advisory Commission member and meteorologist
- Patricia Vinchesi, Town Administrator

Meetings weekly or as warranted.

